



PATENT APPLICATION

Attorney Docket No. 12-1100

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Michael Wojtowicz

Application No.: 09/833,372

Filed: April 12, 2001

For: GaN HBT SUPERLATTICE BASE
STRUCTURE

Group Art Unit: 2815

Examiner: Baumeister, Bradley W.

CERTIFICATE OF MAILING

I hereby certify that this paper is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Attention: Assistant Commissioner for Patents, Washington, D.C. 20231, on this date.

12-30-02

Date

John S. Paniaguas
John S. Paniaguas
Registration No. 31,051
Attorney for Applicant(s)

AMENDMENT TRANSMITTAL

Commissioner of Patents and Trademarks
ATTENTION: Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Transmitted herewith is an amendment/reply in the above-identified application.

1. () A paper requesting correction/substitution of drawings is attached.
2. **Fee for Claims**
(X) No additional fee is required.

The fee for additional claims in accordance with 37 C.F.R. §1.16(b)-(d) has been calculated as shown below:

					SMALL ENTITY		OTHER THAN A SMALL ENTITY	
	Claims Remaining After Amendment	Highest No. Previously Paid for		Present Extra	Rate	Additional Fee	Rate	Additional Fee
Total		Minus	20	--	x 9	--	x 18	--
Indep.		Minus	6	--	X 42	--	x 84	--
Fee for Multiple Dependent Claims					+140		+280	--
TOTAL ADDITIONAL FEES							OR	-----

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3. Method of Payment of Fees

() Enclosed is our firm check in the amount of: \$ _____

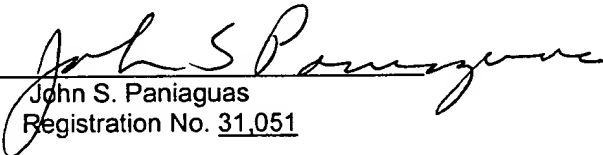
() Charge \$ _____ to Deposit Account No. 50-1214.

4. (X) The Commissioner is hereby authorized to charge any additional fees which may be required in this application under 37 C.F.R. §§1.16-1.17 during its entire pendency, or credit any overpayment, to Deposit Account No. 50-1214. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 50-1214. This sheet is filed in duplicate.

Respectfully Submitted,

December 30, 2002
(Date)

By:


John S. Paniaguas
Registration No. 31,051

KATTEN MUCHIN ZAVIS Rosenman
525 West Monroe Street, Suite 1600
Chicago, Illinois 60661-3693
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TRW Docket No. 12-1100

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Michael Wojtowicz

Serial No.: 09/833,372

Filed: April 12, 2001

For: GaN HBT SUPERLATTICE BASE
STRUCTURE

Group Art Unit: 2815

Examiner: Baumeister, Bradley W.

"Certificate of Mailing"

I hereby certify that this paper is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231 on this date:

Date

John S. Paniaguas
Registration No. 34051

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12-30-02 John S. Paniaguas

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OFFICE ACTION RESPONSE

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

In response to the Office Action dated August 28, 2002, issued in the above-identified application, please enter and consider the following amendment and remarks.

IN THE SPECIFICATION:

Please amend paragraph [0005] on page 2 as follows:

A1 [0005] In a homojunction bipolar transistor, holes are ejected from the emitter layer into the base layer as a result of the forward biased emitter junction. The injection of holes into the base layer results in a lower cut off frequency and lower current gain of the device resulting in lower efficiency and a lower frequency of operation of the device. In order to reduce the hole injection, the base p-doping is normally made lower than the emitter. Unfortunately, such a